

REMARKS

This Amendment is in response to the Office Action of December 18, 2006. The Office Action indicated that Claims 1-19 are pending and rejected. With this Amendment, Claims 1, 9 and 12 are amended, and Claims 1-19 are presented for reconsideration and allowance.

Rejections under 35 U.S.C. §103

Claims 1, 2, 4, 12-13, 17 and 19 were rejected under 35 U.S.C. §103(a) over Oweis et al. (U.S. Patent No. 5,651,255) in view of Iwasaki et al. (U.S. Patent No. 6,325,611). Dependent Claims 3, 5-8, 14-16 were rejected under 35 U.S.C. §103(a) over Oweis et al. in view of Iwasaki et al. and further in view of other references (Rouillard or Dansui or Oosaki or Bechtold).

Independent Claims 1, 12 are presently amended to include limitations to a first layer conducting heat flow from a hot spot. Oweis et al does not teach or suggest a first layer conducting heat flow from a hot spot. Oweis instead teaches a low emissivity metal foil 3 “which functions to reverberate the heat flux” (Oweis, column 2, lines 29-30). Claims 1, 12, as presently amended specify heat flow conduction, whereas Oweis teaches only reverberation (i.e., reflection) from a thin metal foil. Oweis does not teach conduction of heat flow as presently claimed. Reverberation (reflection) of heat flow is not the same thing as conduction of heat flow. Iwasaki et al. also does not teach or suggest a first layer conducting heat flow as presently claimed in Claims 1, 12. Neither Oweis nor Iwasaki, taken singly or in combination, teach or suggest conduction of heat through a first layer as presently claimed in Claims 1, 12. The dependent claims 2-8, 13-17 and 19 include limitations that, when taken in combination with the limitations of the amended independent claims 1 or 12, are also believed to be patentable. Withdrawal of the rejections, reconsideration of amended Claims 1, 12 as well as dependent claims 2-8, 13-17 and 19, and allowance of Claims 1-8, 12-17 and 19 are therefore requested.

Independent Claims 1, 12 are amended to include limitations to a second layer covering the first layer to prevent contact between the combustible atmosphere and the first layer. Oweis et al does not teach or suggest a second layer covering a first layer to prevent contact between a combustible atmosphere and a first layer. Oweis instead teaches “a porous low thermal conductivity material spacer” (Oweis, column 2, lines 31-33). Claims 1, 12, as presently amended

specify that the second layer covers the first layer to prevent contact between a combustible atmosphere and a first layer, whereas Oweis teaches only a porous layer. A person of ordinary skill would know that Oweis' porous layer would allow a combustible gas to pass through it and contact a first layer. Iwasaki et al. also does not teach or suggest covering a first layer with a second layer to prevent contact between a combustible gas and a first layer, as presently claimed in Claims 1, 12. Neither Oweis nor Iwasaki, taken singly or in combination, teach or suggest covering with a second layer to prevent contact between a combustible gas and a first layer as presently claimed in Claims 1, 12. The dependent claims 2-8, 13-17 and 19 include limitations that, when taken in combination with the limitations of the amended independent claims 1 or 12, are also believed to be patentable. Withdrawal of the rejections, reconsideration of amended Claims 1, 12 as well as dependent claims 2-8, 13-17 and 19, and allowance of Claims 1-8, 12-17 and 19 are therefore requested.

Claims 9 and 10 were rejected under 35 U.S.C. §103(a) over Miller et al. (U.S. Patent No. 5,204,194) in view of Oweis et al. '255. Claims 11, 18 were rejected under 35 U.S.C. §103(a) over Miller et al. in view of Oweis et al. and further in view of other references (Magert or Iwasaki).

Independent Claim 9 is presently amended to include limitations to a first layer conducting heat flow from a hot spot. Miller et al does not teach or suggest a first layer conducting heat flow from a hot spot. Miller instead teaches only an electrical insulation layer 22. Materials that provide electrical insulation do not necessarily provide either thermal insulation or thermal conduction. Electrical insulation is not the same thing as either thermal insulation or a thermal conductor. Miller does not teach or suggest a layer of thermally insulating material as presently claimed in Claim 9. Claim 9, as presently amended, specifies heat flow conduction, whereas Miller is silent on heat flow conduction. Oweis et al. also does not teach or suggest a first layer conducting heat as presently claimed in Claim 9 (as explained above). Neither Miller nor Oweis, taken singly or in combination, teach or suggest conduction of heat through a first layer as presently claimed in Claim 9. The dependent claims 10-11, 18, include additional limitations that, when taken in combination with the limitations of the amended independent claim 9, are also believed to be patentable. Withdrawal of the rejections, reconsideration of amended Claim 9 as well as dependent claims 10-11 and 18, and allowance of Claims 9-11 and 18 are therefore requested.


Independent Claim 9 is amended to include limitations to a second layer covering the first layer to prevent contact between the combustible atmosphere and the first layer. Miller et al does not teach or suggest a second layer covering a first layer to prevent contact between a combustible atmosphere and a first layer. In Miller, there is only one layer and it is an electrical insulation layer 22. Claim 9, as presently amended, specifies that the second layer covers the first layer to prevent contact between a combustible atmosphere and a first layer, whereas Miller teaches only a single layer and does not teach preventing contact between a combustible atmosphere and a first layer. Miller's electrical insulation layer 22 is in contact with the surrounding atmosphere. Oweis et al. also does not teach or suggest covering a first layer with a second layer to prevent contact between a combustible gas and a first layer (as explained above), as presently claimed in Claim 9. Neither Miller nor Oweis, taken singly or in combination, teach or suggest covering a first layer with a second layer to prevent contact between a combustible gas and a first layer as presently claimed in Claim 9. The dependent claims 10-11 and 18 include limitations that, when taken in combination with the limitations of the amended independent claim 9, are also believed to be patentable. Withdrawal of the rejections, reconsideration of amended Claim 9 as well as dependent claims 10-11 and 18, and allowance of Claims 1-8, 12-17 and 19 are therefore requested.

Conclusion

With this Amendment, the application appears to be in condition for allowance, and favorable action is requested. The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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